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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, DAVID Q

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 06/14/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/693,137

Applicant(s)

BRIDGEHALL, RAJ

Examiner

David Q Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-11 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 and 15 is/are allowed.
- 6) ☒ Claim(s) 1-6,9-11 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 05/12/04 have been fully considered but they are not persuasive.

In response to applicant's argument on pages 8-9, Applicants argue that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (In this sense, Bursztejn is quite different from the present invention, which is directed towards true-mode communication. ("Mobile unit 10 is arranged to communicate using both standards and to coordinate communications using the Bluetooth standard with the communications using the 802.11 standard." (Specification, p.7, lines 12-15, emphasis added))).

The present invention is directed to true dual-mode communication which is carried out continuously, as opposed to the mode-switching registration process of Bursztejn. (see Specification, p. 11, lines 17-18; "The sequence of interrupting 802.11 traffic for Bluetooth activity may be repeated at a data cycle which can be selected according to the 802.11 and Bluetooth radio activity.")) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to Applicants' Remark on page 9, Applicants argue: "Bursztejn fails to disclose or suggest "reserving a transmission time interval in a frame of said first wireless protocol."

Examiner respectfully disagrees because Bursztejn clearly discloses reserving a transmission time interval in a frame of said first wireless protocol (see col. 8, lines 43-51).

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In response to Applicants' Remark on page 10, Applicants argue that the cited portion of Bursztejn fails to disclose or suggest said operating said mobile unit under said second wireless protocol comprises operating said mobile unit under said second wireless protocol to act as a master unit for at least one slave unit operating under said second wireless protocol, reserving a transmission time interval in a frame of said first wireless protocol and controlling said slave unit using said second wireless protocol to transmit using said second wireless protocol during said reserved time interval.

Examiner respectfully disagrees because Bursztejn discloses operating said mobile unit under said second wireless protocol comprises operating said mobile unit under said second wireless protocol to act as a master unit for at least one slave unit operating under said second wireless protocol, reserving a transmission time interval in a frame of said first wireless protocol and controlling said slave unit using said second wireless protocol to transmit using said second wireless protocol during said reserved time interval (see abstract and col. 8, lines 43-51).

In response to Applicants' Remark on page 11, Applicants argue that Young fails to disclose or suggest at least the steps of "converting said output first and second protocol baseband signals to said received digital signals in said first protocol frame format" and "converting said output digital transmission signals from said first protocol frame format to said first or second protocol baseband signals."

Examiner respectfully disagrees because Young clearly discloses "converting said output first and second protocol baseband signals to said received digital signals in said first protocol frame format" and "converting said output digital transmission signals from said first protocol

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frame format to said first or second protocol baseband signals.” (see abstract and fig. 5; col. 5, line 6 to col. 7, line 6).

In response to applicant's argument on page 12, Applicants argue that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (the cited portion of Young fails to disclose or suggest a configurable bit stream processor as described in the specification and recited in claim 10 as an “interface unit.” The interface unit “is arranged to process the serial bit streams for both the Bluetooth and 802.11 communication.”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Bursztejn et al. (US Patent Number 6459688).

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Regarding claim 1, Bursztejn et al. disclose a method for operating a dual-mode mobile unit arranged to transmit and receive signals using first and second wireless protocols comprising: operating said mobile unit under said first wireless protocol (see col. 8, lines 33-51); reserving a transmission time interval in a frame of said first wireless protocol (see col. 8, lines 43-51); operating said mobile unit under said second wireless protocol during said reserved time interval (see col. 8, lines 43-51).

Regarding claim 4, Bursztejn et al. also disclose wherein said operating said mobile unit under said second wireless protocol comprises operating said mobile unit under said second wireless protocol to act as a master unit for at least one slave unit operating under said second wireless protocol, reserving a transmission time interval in a frame of said first wireless protocol and controlling said slave unit using said second wireless protocol to transmit using said second wireless protocol during said reserved time interval (see col. 8, lines 43-51 and abstract).

3. Claims 9-11 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Young (US Patent Number 6643522).

Regarding claim 9, Young discloses a method for operating a dual mode mobile unit comprising: providing a first transmitter for operation using a first wireless protocol and responsive to first protocol baseband signals (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6); providing a first receiver for operation using a first wireless protocol and providing output first protocol baseband signals (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6); providing a second transmitter for operation using a second wireless protocol and responsive to first protocol baseband signals (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6); providing a second receiver for operation using a first wireless protocol and providing output second

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protocol baseband signals (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6); providing a digital processor programmed to process signals for said first and second protocols, responsive to received digital signals in a first protocol frame format and providing output digital transmission signals in said first protocol frame format (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6); converting said output first and second protocol baseband signals to said received digital signals in said first protocol frame format (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6); converting said output digital transmission signals from the first protocol frame format to said first or second protocol baseband signals to said received digital signals (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6).

Regarding claim 10, Young discloses a dual mobile unit for operating according to first and second wireless protocols comprising first and second RF modules, respectively for transmitting and receiving signals according to first and second wireless protocols, and each responsive to baseband signals for transmission and providing output baseband signals on reception (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6); a digital processor responsive to received digital signals for processing said digital signals according to one of said first and second protocols (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6); an interface unit for receiving baseband signals from said first and second RF modules and supplying corresponding digital signals to said processor, and for receiving digital signals from said processor and supplying first and second corresponding baseband signals to said first and second RF module respectively (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6).

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Regarding claim 11, Young also discloses said processor controls said interface unit to send and receive signals to and from said first second RF modules (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6).

Regarding claim 13, Young discloses a dual mobile unit for operating according to first and second wireless protocols, comprising: first and second RF modules, respectively for transmitting and receiving signals according to first and second wireless protocols, and each responsive to baseband signals on reception (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6); a digital processor responsive to received digital signals for processing said digital signals according to one of said first and second protocols (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6); and an interface unit for receiving baseband signals from said first and second RF modules and supplying corresponding digital signals to said processor (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6), and for receiving digital signals from said processor and supplying first and second corresponding baseband signals to said first and second RF modules respectively (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6), wherein said interface unit receives output baseband signals from said second RF module and supplies said corresponding digital signals to said digital processor in a first protocol frame format (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6), and receives digital signals from said digital processor in said first protocol frame format and supplies corresponding baseband signals to said second RF module according to said second wireless protocol (see abstract and fig. 5; col. 5, lines 6 to col. 7, line 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3 and 5-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Bursztejn et al. (US Patent Number 6459688) in view of Malcolm et al. (US Patent Number 5781540).

Regarding claims 2 and 5, the method of Bursztejn et al. fails to disclose operating said mobile unit to transmit using said first wireless protocol during an initial portion of said reserved time interval. However, Malcolm et al disclose operating said mobile unit to transmit during an initial portion of said reserved time interval (see col. 9, lines 44-67). It is apparent one skilled in the art that combination of Malcolm et al with Bursztejn et al. would incorporate operating said mobile unit to transmit using said first wireless protocol during an initial portion of said reserved time interval. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Malcolm et al to Bursztejn et al. in order to interchange signals according with a protocol serving the mobile unit.

Regarding claims 3 and 6, the method of Bursztejn et al. in view of Malcolm et al also discloses operating said mobile unit to transmit using said first wireless protocol during a terminal portion of said reserved time interval (see col. 9, lines 44-67 of Malcolm et al and explanation of claim 2).

Allowable Subject Matter

5. Claims 14-15 are allowed.

Regarding new independent claim 14, the claim contains all limitation of claim 7 which was objected to as being dependent upon a rejected base claim 1 (paper no. 6). The claim has been rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 15 depends on claim 14. Therefore, they are allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q Nguyen whose telephone number is 703-605-4254. The examiner can normally be reached on 8:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika A Gary can be reached on 703-308-0123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN

David nguyen


ERIKA GARY
PATENT EXAMINER